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Blurring of the channel boundaries: The impact of advanced technologies in the physical fashion store on consumer experience

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Abstract—This paper examines the effective integration of online within the offline physical store in one holistic shopping experience in the fashion field. It explores the merging of three key dimensions in creating an integrated experience – physical store variables, advanced technologies implementation and consumer attitudes and motivations. An extensive literature review was conducted from which a conceptual framework ensued. A multi-method qualitative research utilising case study strategy was adopted. The data was collected by observation of fashion stores with advanced technology implementation, experiential consumer interviews to examine motivations, behaviour and interaction with advanced technologies inside the physical store. Finally, interviews with experts provided insights on the role of the store, experiential retailing and the implementation of advanced technologies. The study revealed that targeting more than one human sense positively impacts the shopping experience. Consumer motivations reflected that browsing and idea motivations were determinant drivers to visit the store, on and offline. The role of advanced technologies in the physical store suggests that research online and purchase offline is an essential step in shopping activities. The use of mobile has gained importance, providing opportunities for fashion retailers. The conceptual framework identified the elements that encompass an online-offline shopping experience and serves as a first step in generating an integrated experience. The findings presented are limited to UK fashion retail and cannot be generalised outside the examined cases. The study acknowledges that the research presented is a simplified version of the real shopping experience, as it may be affected by factors other than store design (e.g. service personnel, product). However, this study serves as a starting point for future research in this nascent field of study. This study contributes to knowledge by uniting three previously separate dimensions within the proposed conceptual framework. It provides useful practical insights and recommendations for retailers on the role and usage of technology inside the physical store to aid the consumer-shopping journey. The research makes a unique contribution to on-offline integration and the usage of advanced technologies literature, a relatively new field of academic research. It delivers a comprehensive understanding of advanced technologies, their current use by fashion retailers and the opportunities for their further integration.

Index terms -online / offline, integration, experiential retailing, atmospherics, sensory, customer motivations, shopping journey, advanced technology, omnichannel.

I. INTRODUCTION

In an increasingly dynamic market, fashion retailers are struggling to remain competitive, with many attempting to create stronger relationships with their consumers by changing the look and feel of their retail space (Bell et.al, 2012). Today, store spaces must respond to digital empowered consumers and fuse together sensory and interactive elements to create an unreplicable shopping experience (Medina, 2013).

With technology becoming such an integral part of everyday life, the digital revolution has dramatically changed shoppers’ behaviour (Accenture, 2012). Today, consumers are constantly connected to different devices and online platforms. The shopper journey no longer starts at the high street; it may start during lunch, at work, on the bus or in bed (Deloitte, 2011; Economist, 2012); it is thus more complex. It can be inferred that shopping is divided by online and in-store, where consumers rarely enjoy the benefit of both in the same place (Withers & De Judicibus, 2013).

In this scenario, the role of the physical store must be rethought as an opportunity to combine the best of both worlds, the sensory and emotional experience of the offline world with the access, interaction and convenience of the online world, to be relevant.

This study aims to examine the role of advanced technologies in the physical store and provide meaningful insights about consumer motivations and behaviours towards online and offline shopping. It also addresses the in-store environment as the instrument for effectively integrating both online/offline worlds into a holistic experience to improve the consumer shopping experience (Pantano & Naccarato, 2010).
II. LITERATURE REVIEW

Customer experience
In recent years, retailers have invested in creating superior shopping experiences to connect with customers on both physical and psychological levels (Healy, et al. 2007, Verhoef et al. 2009). From department stores to pop up shops, they all want their physical environment to be a place where consumers live, breathe and feel the brand through interactive and sensory activities in real time (Smilanksy, 2012).

Pine and Gilmore (1999) define experiences as the result of an encounter between a company and a customer, using services as the stage, and goods as props to create a memorable event. Schmitt (1999) adds that experiences provide sensory, emotional, cognitive, behavioural, and relational values. Hence, customer experience is a holistic concept that involves every aspect of a company’s service offering (Zomerdijk & Voss, 2010).

Much research has been carried out on customer experience and the different aspects that impact consumer behaviour in relation to the retail environment (Russo Spena et. al., 2012). Three significant approaches informing this study are: store atmospherics, experiential marketing, and emotional branding (Bitner, 1992; Gobé, 2001; Hultén 2011; Kotler, 1973; Pine & Gilmore, 1999; Schmitt, 1999; Smilanksy, 2012; Turley & Milliman, 2000; Verhoef et al., 2009). These complementary approaches will be discussed in the following sections.

Store atmospherics
Kotler (1973) defined store atmospherics as the conscious design of a space able to create certain effects in buyers. More specifically, atmospherics is the effort to design shopping environments to produce specific emotional reactions in the buyer that enhance the purchase probability. Lighting, colour, scents, music, and layout are elements that can directly influence shopper behaviour (Parsons, 2011). Therefore, store atmospherics encompasses a set of sensorial stimuli that range from tactile, sensory, gustatory, olfactory visual and social factors, capable of influencing internal states of shoppers (Kotler, 1973; Bitner, 1992; Skandran et al., 2011). Turley & Milliman (2000) developed a systematic classification of atmospheric variables grouped in five categories, these are namely external variables, general interior variables, layout and design variables, point of purchase and decoration variables, and human variables as depicted in Figure 1. Each variable attempts to identify and tailor appropriate atmospheric elements that strongly impact consumer behaviour in store. Hence, the retail store needs to be conceptualized as a multidimensional space made up of environmental stimuli capable of providing spaces full of excitement, entertainment and fun (Baron et al. 2001; Holbrook & Hirschman, 1982; Kozinets et al. 2002).

![Figure 1: Store atmospheric variables](source: Turley & Milliman 2000)

Experiential and emotional retailing
The notion of experiential consumption became significant with Pine and Gilmore’s (1999) theory of the experience economy. They suggest experiences are shaped inside the store atmosphere where static elements (e.g. product, shelves, signage) and dynamic factors (e.g. service) work together to engage customers in a way that creates memorable events. In addition, Schmitt (1999) distinguishes five types of experiences called Strategic Experiential Modules (SEMs) that underpin his experiential marketing framework (Schmitt, 1999).

Within fashion retail, brands such as Topshop and Selfridges offer sensorial experiences, from a manicure bar to a restaurant or a beauty salon. Such innovations of utilizing the space to create more of a dynamic environment have demonstrated to be effective and irresistibly entertaining (Wilson, 2005).

From an experiential perspective, it is suggested that the store is perceived by the senses (Soars, 2009). Gentile, et al. (2007) established that good experiences must holistically and consistently involve a person at different levels (rational, emotional, sensorial, physical and spiritual). Moreover, Verhoef et al (2009) theorize that customer experience is holistic in nature and that the total experience, including the search, purchase, consumption, and after-sale phases of the experience involve multiple retail channels. This is
particularly relevant for multi-interface services, where customers can choose among several channels and navigation patterns to undertake a service activity (Patricio et al. 2008).

Gobé (2001) states that sensory experiences are immediate, powerful and capable of changing shopping behaviour profoundly, creating a personal dialogue with consumers to engage them emotionally. Hultén (2011:259) combines both perspectives and presents the multi-sensory brand-experience concept defined as:

“The involvement of the five human senses in generating customer value, experiences, and brand as image.”

This definition underlines the main principles related to the multisensory, aesthetic, fantasy, and emotive aspects of experiential and emotional experiences, conceived in the SM-model as depicted in Figure 2 (Hirschman & Holbrook, 1982; Hultén, 2011; Kozinets et al. 2002; Pine & Gilmore, 1999; Schmitt, 1999).

Figure 2: Hultén’s SM model

Understanding customer motivations online-offline

Online has become an essential way of consumer’s accessing and purchasing fashion. This digital revolution has transformed every aspect of the path to purchase, from searching, to browsing, to purchase. It could be said that technology has enriched it to potentially influence the customer experience (Accenture, 2012; Deloitte, 2011). Consumers are constantly connected to Internet platforms through smartphones, tablets and laptops. Researching products prior to purchase is an increasing trend among connected consumers. They are making more informed decisions by accessing multiple digital channels, from research engines, retailer websites to social platforms (BCG, 2010; McKinsey, 2012).

Utilitarian and hedonic shopping motivations

Previous studies have established that fashion behaviours are deeply rooted in emotional and psychological motivations (Goldsmit et al., 1996; Kang & Park-Poaps, 2010). The emotional aspects of the shopping experience have been the focus of much research, with findings suggesting that hedonic and utilitarian reasons are the main drivers of shopping motivations (Arnold & Reynolds, 2003; Childers et al., 2001; Jones et al., 2006; Kim & Kim, 2008; Pantano & Naccarato, 2010; Ono et al, 2012). Many support the idea that shopping without a purchase can also be valued as a source of emotional satisfaction and entertainment (Babin et al., 1994; Kim & Hong, 2011; Tauber, 1972).

Arnold and Reynolds (2003) generated a scale of six hedonic shopping motivations: adventure, gratification, role, value, social, and idea shopping motivations. They purport that shoppers driven by a larger set of hedonic motivations may pay attention to a larger set of retail attributes (e.g. merchandise displays). Additionally, Kim & Kim (2008) suggest that consumers who enjoy the shopping experience, engage in more purchases compared to those who do not. They proposed a conceptual model that incorporates two shopping modes –browsing and bargain hunting- from the six introduced by Cox et al. (2005) (Mingling, bargain hunting, browsing, sensory stimulation, pampered and kinesthetic experience). A further investigation of online shopping found that enjoyment and usefulness have a positive impact on attitudes toward interactive shopping (Childers et al., 2001). Therefore, it can be said that sensory stimulation and experiential motives generates a sense of excitement, a desire to be entertained and to have fun, and has a positive hedonic impact on both online and physical shopping (Childers et al., 2001; Cox et al., 2005).

Advanced technology and the physical store

The challenge for retailers today is to deliver a seamless holistic experience that is consistent in every channel and technology the consumer chooses to access the brand (store, website, mobile app, tablet, etc.), coined as “Omni-channel” (Pratt, 2012). Rigby (2011) defines it as the way forward for retailers seeking to satisfy customers who increasingly want everything - the advantages of the digital and physical world. Sherwell (cited in Pratt, 2012) calls it “Integrated Retail” and argues that in this new approach, technology plays a massive part as the medium to deliver an integral customer experience (Pratt 2012). Integration of the digital and the physical world is the key to transform the experience into a two-way interaction between brands and consumers across multiple channels and interactive technology platforms in real time (Smilanksy, 2012).
The implementation of advanced technologies in the store is making Omni-channel retail a reality. On the one hand, technology innovations can modify the store appearance and directly impact consumer-shopping behaviour (Pantano & Naccarato, 2010). On the other, they can offer tools capable of integrating the advantages of the digital and physical environment. They play an important role in the conceptualization of the holistic fashion experience in terms of enabling consumers to perform relevant online activities within the store in an enjoyable and useful way.

Furthermore, technological innovations also affect the retailer-consumer interaction by enabling retailers to create more customized services, optimize logistics, and better understand consumer preferences (Bharadwaj et al., 2009; Pantano, 2010; Pantano & Naccarato, 2010; Renko & Ficko, 2010). Therefore, advanced technologies as a strategy to generate engaging fashion retail environments is an increasingly important area for researchers who seek to identify suitable technologies capable of satisfying consumers’ demands and enhance the shopping experience (Dennis, et al., 2012; Bharadwaj et al., 2009; Pantano, 2010; Vieira, 2010; Sousa & Voss, 2006). Pantano and Laria (2012) highlight that immersive technologies such as 3D virtual reality tools can be an efficient method for pushing innovation in retailing, providing enriched interactive interfaces that are particularly appealing for consumers in fashion stores.

Among the current technologies introduced into the physical environment, digital screens and signage, augmented reality displays, Radio Frequency Identification (RFID) systems (Vecchi & Brennan, 2011), mobile innovations (Vecchi et.al, 2010) and applications (Vecchi & Brennan, 2009) and Wifi access are the most diffused (Dennis, et al., 2012; Kowatscha & Maassa, 2010; Pantano and Sevidio, 2012; Pantano and Laria, 2012; Sousa & Voss, 2006). One of the main characteristics of these technologies is that they are “self-service” based, meaning that the service they provide is produced by customers and their interaction with technological interfaces, an attribute that helps increase consumer satisfaction and entertainment (Bittner, et al., 2000).

Table 1 presents a summary of the advanced technologies used in the physical environment.

Table 1: Advanced technologies implementation

<table>
<thead>
<tr>
<th>Advanced Technology</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital screens and signage</td>
<td>Digital screens and signage are devices that aim to establish a communication with consumers along their shopping process and provide a strong entertainment component (Dennis, et al., 2012; Thaiss &amp; Kauko, 2006). The main feature of these technologies is the capability of keeping shoppers updated with products and services available in-store (Pantano &amp; Di Pietro, 2012).</td>
</tr>
<tr>
<td>Augmented reality</td>
<td>Augmented reality technologies are digital displays capable of giving consumers a more realistic representation of the point of sale, by allowing users to interact with products through electronic screens where they can do fast browsing, product detail visualization, customized information and instant purchase options. (Pantano &amp; Servidio, 2012; FSIs, 2011) Augmented reality applications involving smartphones are giving shoppers an exciting in-store experience by merging digital content with touch and feel information in the real world (Pantano &amp; Servidio, 2012).</td>
</tr>
<tr>
<td>RFID</td>
<td>Radio frequency identification (RFID) tools help consumers and retailers to locate products in-store, which have been labelled with RFID tags. They direct consumers to specifically designed interfaces where they can obtain customized information (Pantano &amp; Naccarato, 2010).</td>
</tr>
<tr>
<td>Mobile innovations and applications</td>
<td>Shoppers can use their smartphones to inform their decisions in-store and there is increasing attention towards the development of mobile strategies that enhance consumers’ experiences with brands (Kowatscha &amp; Maassa, 2010). Kowatscha and Maassa (2006) conclude that mobile recommendation agents are an effective means to increase the value of product information in brick and mortar stores.</td>
</tr>
<tr>
<td>WiFi</td>
<td>Connected consumers are demanding connected stores (Print, 2012; Drapers, 2011). Internet access in the physical environment is appealing for customers, who can obtain in-store product information, increasing the likelihood of purchase. Despite the increase in free Wi-Fi in fashion stores, some retailers remain resistant to implement it, arguing that this will lead consumers to compare and purchase competitor products (Drapers, 2011). However, the benefits surpass any disadvantage as it enables retailers to track customer’s shopping behaviour, allows shoppers to conduct personal activities resulting in more time spent in store, facilitate localized targeting of information and access to stock availability (Drapers, 2011; DeShita, 2012).</td>
</tr>
</tbody>
</table>

Source: Author’s own

The aim of these technologies is to make the shopping experience more entertaining and enjoyable. Consumer’s, who enjoy the shopping experience, engage in more purchases compared to those who do not (Kim & Kim, 2008). Meuter, et al. (2000) found that technologies were most satisfactory in cases where they saved time, were easy to use, addressed a salient need, offered greater control and 24/7 access. A typology of advanced technologies implemented in the fashion retail environment is illustrated in appendix 1.

**Conceptual framework**

The three dimensions discussed are merged into creating an integrated on-offline shopping experience in the proposed conceptual framework as illustrated in Figure 3. Physical store variables conceived by combining store atmospherics and multisensory strategies (Turley & Milliman, 2000; Hultén, 2011); advanced technologies implementation by fashion retailers and consumer attitudes and motivations; informed by the five shopping motivations emerging from the literature.
III. METHODOLOGY

Through an exploratory approach, this paper aims to develop a clear understanding of the concept of customer experience and examine the key aspects shaping an integrated (online-offline) and enjoyable fashion experience; to analyse the role of advanced technology in the physical store and its impact on consumer motivations and their shopping journey. The research is based on an examination of secondary and primary data, the latter collected via observations of fashion stores; experiential consumer interviews and expert interviews with professionals in the field.

Due to the dearth of literature on the role and impact of advanced technologies in the fashion sector, a case study approach was selected. Case studies seek to gain a rich understanding of the context studied allowing the researcher to maintain the holistic characteristics of real-life events (Bryman & Bell, 2007; Yin, 2009). A multi-method qualitative study provided opportunities of studying the complex, interactive and personal nature of the shopping experience inside the store (Tashakkori and Teddlie, 2003; Carson & Hine, 2007). The use of triangulation is an important attempt to fully explain the rich and imaginative way of maximising the amount of data collected for this cross-sectional study (Denzin, 1970; Easterby-Smith et al. 2008).

Observation

Observation involves a systematic and selective way of watching and listening to an interaction or phenomenon as it takes place (Bryman & Bell, 2007). Observation is believed to be an appropriate method, providing information about the current reality of the fashion retail store and the shopping experiences offered to customers and their impact.
Experimental interviews

The study employed an adaptation of the Shopping With Consumers (SWC) technique, conceived as consumer experiential interviews. The purpose of employing this method was to produce rich consumer behaviour insight resulting from the shopping experience in the physical environment. Silberer et al (2009) suggest that in order to achieve such valuable information, techniques that only collect information from a static viewpoint are not sufficient. For this reason, the experiential interviews encompassed both interviews to recollect in-store experiences, attitudes and opinions, and observation to record in-store behaviour. The research instrument consisted of four main steps, as outlined in Table 5

Table 5: Consumer experiential interviews structure

<table>
<thead>
<tr>
<th>#</th>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Preliminary interview</td>
<td>- Explained the scope of the project</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Assessed willingness towards participation and obtained demographic characteristics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Outlined the five cases selected</td>
</tr>
<tr>
<td>2</td>
<td>Pre-interview</td>
<td>Captured participant’s in-store, shopping plans, intentions and shopping path</td>
</tr>
<tr>
<td>3</td>
<td>Observation of the shopping process</td>
<td>Adopting a non-participant observation role, the researcher unobtrusively followed participants and recorded their shopping movements and approach activities in an observation grid.</td>
</tr>
<tr>
<td>4</td>
<td>Post interview</td>
<td>Collected information that revealed participant’s opinions and views in relation to the overall shopping experience.</td>
</tr>
</tbody>
</table>

The consumer sample consisted of 10 respondents selected based on purposive sampling (Bryman & Bell, 2007). They represented the “connected consumer”, (Deloitte, 2012) women between the ages of 20-35 who are technology savvy, prolific in fashion shopping and research behaviour both online and offline (Drapers, 2012). Moreover, participants were asked how often they visited the stores and if they had purchased from them to assess their familiarity with the cases. Only those familiar (i.e. visited at least every 3 months) with the stores were asked to participate.

Interviews

Semi-structured interviews with experts to generate insights on store atmospherics, experiential design, the role of advanced technologies and future predictions for on/offline integration were conducted. The questions posed were derived from the literature and enshrined in the conceptual framework, as shown in Appendix 2. Interviewees were selected using purposive sampling (Bryman & Bell, 2007). All had a level of expertise and experience in the development of store design within the fashion industry.

The data obtained was analyzed using content analysis. Themes utilizing terms emerging from existing theory were identified. Analyzing, synthesising and transforming data into codes translated respondent perceptions and meanings. Themes were grouped into categories and topics determined by the conceptual framework in order to gain interpretive understanding (Bryman & Bell, 2007).

IV: FINDINGS AND DISCUSSION

The findings and analysis are shaped around the research questions arising from the literature and specifically the application of the conceptual framework.

The creation of effective in-store fashion experiences

Results from the consumer experiential interviews concerning which store presented the most favourable design showed a strong relationship between environments with a theme or a defined fashion concept and decoration variables used to communicate the brand essence (i.e. through product timelines, videos, storytelling displays), as evidenced below.

“I really like all the installations and experiential elements, they have stories. Everywhere they talk about the brand and the history. They have attention to detail” (consumer interview).

“...It was about thinking what are the elements of the brand, what does it stand for, what is its history and its heritage and lets inject that into the retail environment, which should be the physical representation of the brand” (expert interview).

Burberry and Niketown were appraised for their pleasant ambiance, balanced lighting, spacious areas, and innovative visual merchandising. This is consistent with Gentile, et al. (2007), who suggests that good experiences holistically and consistently involve customers in the brands’ universe. In contrast, stores with excessive decorative elements made participants feel overwhelmed despite helping to construct a fashion presence, such as New Look and Topshop.

“[Niketown] has a really luxurious experience”

“[Burberry] you notice the amazingly spacious store before the product”

“[Topshop] is just too cluttered to find anything”
“It [New Look] feels a bit dirty and messy”
(consumer interviews)

Store atmospheric and sensorial variables that generate pleasurable experiences

The exploration of the consumer experience inside the physical store highlighted key static and dynamic atmospheric elements important to delivering an online/offline integrated shopping experience, as evidenced below.

Store atmospheric variables:

External variables – welcoming threshold with mannequins or installations is desirable.

Internal variables: layout & design – ease of navigation positively impacted browsing

Decoration variables – use of products to create displays and installations positively perceived.

“I liked the stairs [NewLook] when you come in, because it’s something different”

“The mannequins give outfit ideas and what’s new in store [Topshop]”

“The large open space allows the product to shine [Burberry]”

“The shoe installation using products [Niketown] and the central installation when you arrive, are so eye-catching” (consumer interviews).

Multi-sensory variables:

Sight – enshrined in store atmospheric variables above.

Touch - fashion decision-making was strongly positively related to product touch.

Sound - enthusiasm concerning appropriate music that represented the brand was evidenced, positively impacting enjoyment and thus browsing.

Smell - evaluations on the use of scent did not reveal a strong perception among participants, apart from Burberry

Taste – Only Selfridges and Topshop addressed taste inside the physical store with cafes. Consumers positively perceived the option to eat or drink in side the store, but only when in large-scale stores and spend a considerable length of time shopping.

Extended shopping experiences - significant interest in extended in-store experiences was expressed. Most participants felt that retailers should provide other activities related to their brand. They are willing to immerse in new experiences that they believe are relevant and give a complete fashion experience, supporting Gentile, et al. (2007).

“The mannequins really inspire the sports culture [Niketown]”

[Selfridges] “You feel a rich texture in the carpets, creating a more luxurious experience” (consumer interview)

[Niketown] “I liked the music, I recall thinking its good for sport and gets you in the mood” (consumer interview)

“If you go to a store that has a distinct smell, you start to associate that smell with the brand.” (expert interview)

“The physical store helps customers to immerse themselves in the brand’s universe. People need a space to go and engage with the brand” (expert interview)

The importance of the store as a multidimensional space acknowledged by several researchers (Baron, et.al, 2001; Holbrook & Hirschman, 1982; Kozinets et al. 2002), proved to be relevant as stores with strong fashion concepts are capable of providing spaces full of inspiration and excitement. Therefore, the selection of the atmospheric and sensorial variables must be in synergy with the conceptualization in order to involve all five senses as suggested by Hultén (2011). Based on the findings, Table 6 presents a summary of the effectiveness of sensorial experiences in the cases studied.
Table 6: Senses effectiveness in-store

<table>
<thead>
<tr>
<th>Sense</th>
<th>HMV</th>
<th>Topshop</th>
<th>Selfridges</th>
<th>Niketown</th>
<th>New Look</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sight</td>
<td>Effective</td>
<td>Absent</td>
<td>Absent</td>
<td>Absent</td>
<td>Absent</td>
</tr>
<tr>
<td>Sound</td>
<td>Not perceived</td>
<td>Ineffective, too loud or offbeat</td>
<td>Effective, vibrant &amp; energetic</td>
<td>Not perceived</td>
<td>Ineffective, too loud or offbeat</td>
</tr>
<tr>
<td>Taste</td>
<td>Limited, beverages for some clients</td>
<td>Absent</td>
<td>Absent</td>
<td>Effective, but acceptable in department store</td>
<td>Effective, cupcakes, yoghurt, coffee &amp; sweets</td>
</tr>
<tr>
<td>Touch</td>
<td>Neglected, limited to iPad &amp; one interactive sensor</td>
<td>Limited to iPad &amp; one interactive sensor</td>
<td>Not applicable, due to store format</td>
<td>Effective, make-up, nail tester, hair salon, piercing, waxing &amp; tanning</td>
<td></td>
</tr>
</tbody>
</table>

Source: authors own

Motivations towards online – offline shopping:

Online and offline motivations driving consumers into the physical store

The majority of participants were motivated to visit the physical store for recreational or browsing interests rather than with an intention to buy. Through observation, the majority of respondents who were browsing, showed idea shopping motivations as well, by being interested in checking new trends and innovations in the fashion collections.

“I like to go to stores for ideas, inspiration, to see new season trends” (consumer interview)

This supports the findings of Ono et al. (2012), who states that online and offline browsers are most likely to have idea motivation. This study suggests that browsing takes place collectively with idea motivations and not separately. Participants showed more hedonic than utilitarian motivations, making them more attracted towards retail decorative variables and sensorial experiences.

“The attention to detail in the product chandelier [Niketown] and the way the denim jeans were displayed [Selfridges] makes me want to hang out in the store longer” (consumer interview)

The results corroborate the theory proposed in the literature (Childers et al. 2001; Cox et al., 2005) stating that sensory stimulation and experiential motives generates a sense of excitement.

The affect of the multichannel shopper journey on in-store experience

Many respondents claimed they researched online before going shopping to the physical store. Some stated that online research is an essential step of their entire shopping journey. These findings are consistent with those of McKinsey (2012) who found that digital research has seen a significant rise. Most respondents expressed that their shopping journey would continue after visiting the store. In contrast, when products seen online were difficult to find, they experienced frustration, negatively impacting the shopping experience and purchase intention.

“I go and try on in store, I often think about it, go home, and if I really want it, I buy it online”

“I hate it when I find something I like online and it’s out of stock or I just can’t find it in store, which often happens”

“I like to be informed of any flash sales or discounts on my mobile” (consumer interviews)

Although this supports that technology is merging the journey, from researching a need, to supporting purchase online and/or offline, to post-purchase, the findings show that all five retailers were inconsistent in providing appropriate actions to link the digital shopper journey inside the physical environment. Mobile was the main technology observed, used to merge the virtual with the real world, emphasising a weakness from fashion retailers. Hence, a connected experience that occurs consistently across all channels is critical to avoid shopper disappointment as suggested by Pratt (2012) and verified in the expert interviews.

“What retailers need to understand is that people are using their smartphones to shop. Its about understanding people’s behaviour” (expert interview)

“All of the customer’s ability to personalise their experience will improve, and mobile is helping drive this” (expert interview)

Advantages of the virtual: opportunities for integration into the physical environment
All respondents owned a smartphone and a few owned a tablet. The main role of mobile is for browsing, as consumers prefer to shop on their tablets or on their computer. During observation a significant amount of shoppers were using their mobile devices to find and compare products, supporting Deloitte’s (2013) assertion of mobile as the perfect shopping companion. Relevant insights of how phones are being used and what features of the virtual world are most useful emerged: for rich product information – scanning tags; creation and in-store access of product wish lists – take pictures, compare or retrieve later; search sizes online. The findings highlight that hedonic motivations have to be supported with strong inspirational and decorative variables inside the store, whilst also emphasising the use of mobile as an important tool for the shopping experience, connecting the research online and purchase offline activities. A summary of the consumer shopping motivations and technology informed shopping journey is evidenced in Table 6.

Table 6: Consumer shopping motivations and technology

<table>
<thead>
<tr>
<th>Consumer aspect</th>
<th>Category</th>
<th>Insights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shopping motivations</td>
<td>Browsing and in-store shopping</td>
<td>Shoppers are constantly looking for inspiration inside the store</td>
</tr>
<tr>
<td></td>
<td>Value</td>
<td>Shoppers would like to be informed of sales and discounts</td>
</tr>
<tr>
<td>Complex shopping journey</td>
<td>Advanced technology</td>
<td>Connected consumers empowered by their use of mobiles</td>
</tr>
<tr>
<td></td>
<td>Online advantages</td>
<td>Consumers online experience is not fully connected in the physical store</td>
</tr>
</tbody>
</table>

Advanced technology in store:

Technologies that enhance the shopping experience and satisfy consumer needs

Respondents agreed that the implementation of advanced technologies was not clearly noticeable in stores like New Look, Niketown and Selfridges mainly because they were placed in hidden areas. In contrast, participants in Burberry felt that the technology was visible and perceived the store as “technological” and “innovative” due to the size and quality of the digital screens.

None of the five technologies in the literature was consistently implemented in the five cases. Digital screens and signage were included in four stores; tablets were used in three; RFID and Wi-fi in one. Augmented reality was excluded from all the experiences as illustrated in Table 7. This suggests a tenuous relationship between being perceived as a technological store and implementing a variety of technologies.

Table 7: Advanced technologies implemented by the retailer cases

<table>
<thead>
<tr>
<th>Store</th>
<th>Digital screens and signage</th>
<th>Augmented reality</th>
<th>RFID</th>
<th>Mobile</th>
<th>Wi-fi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burberry</td>
<td>Kids digital screens &amp; iPads</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>New Look</td>
<td>Digital signage, Tablets and Interactive screen</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Niketown</td>
<td>Digital screens, iPads &amp; customisation computers</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Topshop</td>
<td>Interactive screen</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Selfridges</td>
<td>Interactive screen</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

Source: authors own

The impact of advanced technologies on the physical store shopping process

Need recognition:

Observation showed that the need-recognition stage proposed by Pantano and Naccarato (2010) was only addressed by store atmospheric variables, like display mannequins and installations. When interacting with technologies, the information given failed to provide details about new products and arrivals to respondents.

[NewLooks interactive corner] “Poor options, they only gave me one look, I was expecting so much more”

Search for product and perceived usefulness:

One of the main reasons cited by respondents for interacting with in-store technologies was to search for product information. However, when questioned about how inspiring they were, there was a general consensus that they were not interesting or limited in usage.
“The videos [Selfridges] should be more developed. If you choose a video it should give you all the brands that have that style”

“Boring” [Selfridges denim bar video screens]

[Newlook] “I wanted to find a necklace shown on screen but I couldn’t find it”

These findings support the importance of idea motivations suggested by Ono et al. (2012), ensuring connectivity between technology and usability. New Look, Niketown and Selfridges presented failures in their technologies resulting in negative perceptions of usefulness among respondents.

“The ipads in Nike are useless, so slow”

“Some didn’t work [NewLook]”(consumer interviews)

The findings concur with Meuter, et al. (2000) that drew correlations between satisfaction and poor encounters with technologies.

Purchase consumption:

Most participants expressed that technologies did not affect their shopping intentions. They provided fashion inspiration but little else. However, all participants acknowledged that they were willing to use technologies to complete transactions.

“The queuing in some stores is awful. Contactless payment would be amazing”

“I think if retailers are going to use technology in-store they could do it so much better” (consumer interview)

Post-purchase consumption:

Respondents were consistent in their opinion of technologies improving the shopping experience. The research revealed that most considered it important to have technology embedded in the physical environment and were particularly keen about having Wi-Fi access. The findings suggest that physical environments are making efforts to incorporate advanced technologies, however an integrated experience is still missing. Fashion retailers have not reached the point where they are able to unite the physical store, the online shopping world and mobile into one seamless experience. The Omni-channel concept proposed by several authors (Rigby, 2011; Pratt, 2012; Smilanksy, 2012) was not confirmed in practice.

The role of the store has entered a stage of redefinition with a very ambitious goal - to become the platform where the physical and virtual worlds converge into one seamless experience (Pratt, 2012). The development of engaging shopping experiences through store atmospherics and multisensory strategies are two aspects well documented in the literature (Gobé, 2001; Hultén 2011, Soars, 2009; Turley & Milliman, 2000). However, little attention has been given to how advanced technologies inside the physical store affect the shopping experience, particularly in fashion retail, which is the gap this study attempted to fill.

Previous studies on the importance of creating customer experiences (Gentile et al, 2007; Hultén 2011; Parsons, 2011, Pine & Gilmore, 1999; Turley & Milliman, 2000) were supported empirically. This study revealed that a coherent store design that merges more than one sense, positively impacts the shopping experience.

The increasing complexity of the customer’s multichannel shopping journey is well documented in contemporary literature (Pantano & Naccarato, 2010; Deloitte, 2012), demanding seamless integration of the online and offline worlds and an understanding of technology savvy consumer shopping motivations (Pratt, 2012; Smilanksy, 2012). This study confirms that browsing and idea motivations are determinants for consumers on and offline, with many consumers researching online before buying offline. Within this mobile is shown to play an increasingly important role in merging the on and offline, presenting opportunities for

Table 8 summarises the impact of digital technologies on the consumer-shopping journey.

<table>
<thead>
<tr>
<th>Advanced technology aspect</th>
<th>Shopping Process</th>
<th>What is happening now</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shopping process</td>
<td>Need for recognition</td>
<td>Shoppers feel frustrated and bored with slow technology</td>
</tr>
<tr>
<td>Perceived usefulness</td>
<td>Shoppers feel frustrated and bored with slow technology</td>
<td></td>
</tr>
<tr>
<td>Search for information</td>
<td>Shoppers need to easily navigate through the store and find information and inspirational content</td>
<td></td>
</tr>
<tr>
<td>Pre-Purchase evaluation</td>
<td>Shoppers prefer to be sure and informed</td>
<td></td>
</tr>
<tr>
<td>Purchase consumption</td>
<td>Shoppers feel frustrated when they cannot access a product seen in a technology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shoppers feel frustrated with long queues and few till points</td>
<td></td>
</tr>
</tbody>
</table>

Source: authors own

V. CONCLUSION
further integration, corroborating with Kowatscha & Maassa (2010)

In-store technologies as a way of pushing innovation (Pantano & Laria, 2012) were supported by consumer’s perception of stores such as Burberry and Niketown to be, “technological”. However, findings also revealed that consumers tend to ignore technology implementations, which differs from Pantano & Laria’s assertions (2012). Those that did interact with technology in the study often found the technology useless, negatively impacting their effectiveness. These shortcomings present opportunities for retailers, supporting Pantano & Naccarato (2010) who suggest the role of advanced technologies is to support the shopping process and make it entertaining and enjoyable.

Conceptual framework and recommendations

The three dimensions outlined in the model, physical store environment, consumer attitudes and motivations and implementations of advanced technologies, provided the basis for this study. Uniting five determinants (atmospheric and multisensory variables, advanced technologies, consumer motivations and the shopping process) never previously linked, provided a novel approach. Collectively, insights shed new light on the factors at play when customers seek to bring their online world inside the retail environment. This contributes to knowledge by concluding that effective online-offline shopping experiences are the result of careful thought on the role of technology inside the store in order to coherently integrate an atmospheric, multisensory and technological strategy. A number of recommendations are asserted from the study for retailers attempting to integrate on and offline within the physical space, as shown in Table 9.

Table 9: Recommendations for retailers

<table>
<thead>
<tr>
<th>Source: authors own</th>
</tr>
</thead>
</table>

The conceptual model is a viable starting point to generate an online-offline integrated experience. As it is conceptualized with current technologies, it should be dynamic to adapt to future technology innovations. The framework is suitable for consumers who are digitally savvy and have a strong online shopping behaviour.

VI. LIMITATIONS AND FUTURE RESEARCH

Whilst the study contributes to a nascent field of research, the limitations of the study are still recognised. The study takes a simplified view of the shopping experience, as it is affected by additional factors, like product and service, than just store design. In addition, the findings are limited to UK fashion retail and cannot be generalised outside the examined cases. The study also used a consumer sample familiar with the cases, which could infer store preference. It would be
beneficial to assess how technology and the store environment impacts non-familiar consumers. Yet, this paper contributes to
the discourse by providing a better understanding of the role and impact of technology inside the physical store and how
this can elevate the consumer shopping process. Future research could explore the impact mobiles represent for
providing innovative solutions. In the same context, further examination of enabling consumer’s devices to be transformed
in personal shopping assistants could be studied. Finally, a better understanding of how technology influences male
consumers shopping experiences inside the physical store would be relevant to study particularly for retailers who target
both genders.

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Authors Profile

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